Syllabus

Principles of Computing

Fall 2024

UNIVERSITY OF NOTRE DAME

This course is a first exposure to the theory and practice of computing using the `Python` programming language. No background is assumed.

1 Course Information

Daniel Gonzalez Cedre	dgonza26@nd.edu	Thu.	5:00 pm	9:00 pm	143 DeBartolo Hall
		AND BY APPOINTMENT			
Helena Berens	hberens@nd.edu	Tues.	3:30 pm	5:00 pm	114 Pasquerilla Center
	hberens@nd.edu	Fri.	3:00 pm	4:00 pm	116 Pasquerilla Center
Chris Fakhimi	cfakhimi@nd.edu	Wed.	7:00 pm	9:00 pm	120 DeBartolo Hall
Johanna Olesk	jolesk@nd.edu	Mon.	2:00 pm	3:30 pm	315 Malloy Hall

Tab. 1: Contact information and office hours for the instructor and TAs.

2 Calendar & Schedule

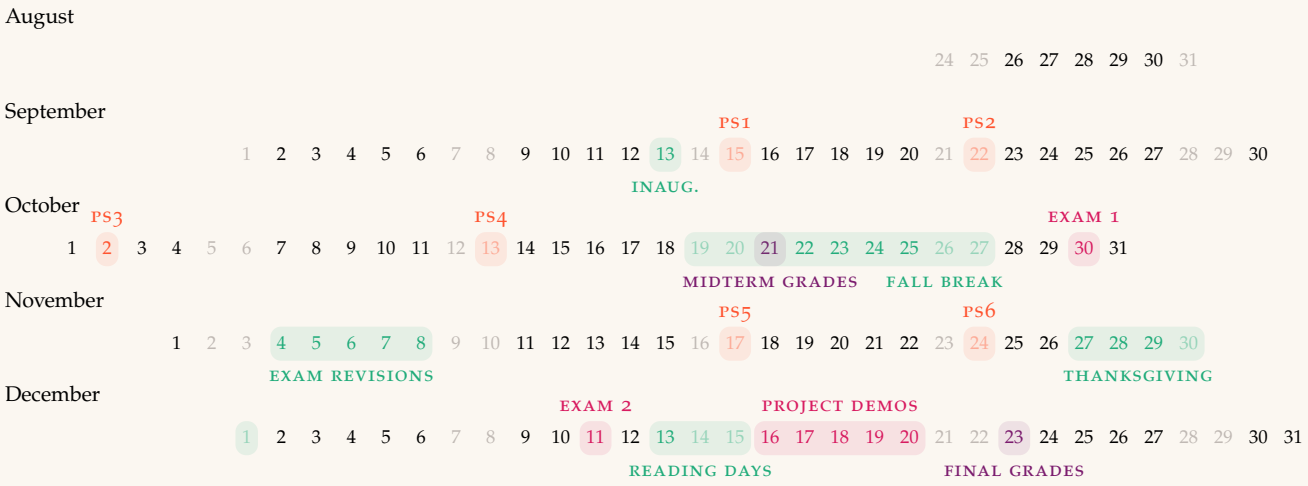

Fig. 1: Important dates and deadlines.

Lectures	Mon. & Wed.	3:30 pm	4:45 pm	114 Pasquerilla Center
Exam 1	10/30/2024	3:30 pm	4:45 pm	114 Pasquerilla Center
Exam 2	12/11/2024	3:30 pm	4:45 pm	114 Pasquerilla Center
Project Demos	Finals Week	BY APPOINTMENT		

Tab. 2: Lecture and exam schedule.

3 Grading

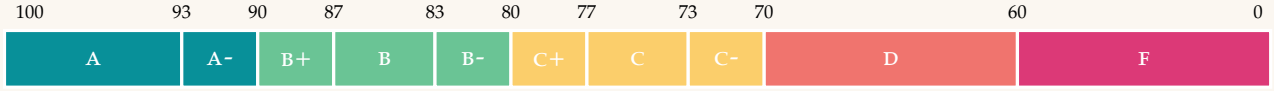

Fig. 2: The scale for determining letter grades. Final grades are rounded up.

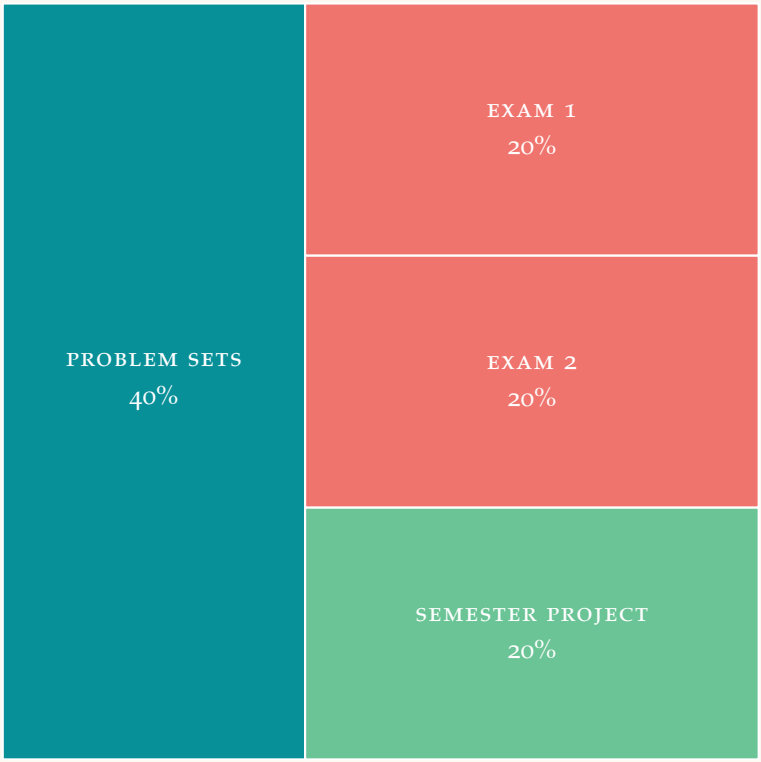

Fig. 3: Breakdown of grades by type. The lowest problem set is dropped. If the final exam score is greater than either of the midterm exams, its score will replace the lower of the two midterm exams.

4 Assignments

Problem Sets

There will be roughly 11 graded problem sets throughout the semester (*cf.*, *figure* 1). Problem sets will be assigned every week and will be due at midnight on Sundays. Solutions will be posted to Canvas shortly afterwards. Late submissions will receive zero points and there will be no makeups for problem sets. The lowest problem set will be dropped.

Exams

There will be two written midterm exams. Two sheets of handwritten notes will be permitted, written on `8.5 x 11` or `A4` paper. *If the final exam grade is greater than either midterm grade, the final replaces the lower grade.* Makeup exams will be handled on an individual basis.

Projects

Details are forthcoming.

5 *Resources*

Textbook

There is no required textbook. Optional resources are provided below.

1. *"Automate the Boring Stuff with Python"* by Al Sweitgart
2. *Intro to Programming*[1] and *Intro to Python*[2] from Kaggle.
3. The *Python Tutorial*[3] from the developers of the Python language.

[1] https://www.kaggle.com/learn/intro-to-programming
[2] https://www.kaggle.com/learn/python
[3] https://docs.python.org/3/tutorial/

Github

A `git` repository for the class has been set up at https://github.com/daniel-gonzalez-cedre/2024_fall_principles-of-computing. Important class documents (*e.g.*, problem sets, lecture notes, this syllabus) will be posted here first and foremost. Most of this material will later be mirrored on Canvas, but the `git` repo will host the official version of every important document and will be updated most frequently.

Canvas

The Canvas page for this course can be found at https://canvas.nd.edu/courses/100556. The syllabus, problem sets, solutions, lecture notes, and other course-related documents will be posted here. *Video and audio for all lectures will be recorded and posted to Canvas through Pantopto.* Assignment submissions will all take place on Canvas.

Slack

A Slack server named `#2024_fall_principles-of-computing` has been set up for the class at https://2024fallprinciples.slack.com. This will be the easiest and fastest way to contact the instructor and TAs, and will be the instructor's primary mode of communication with the class. We encourage you all to use Slack to communicate with each other as well. Direct messages and private channels on Slack *are not visible to any parties other than those involved in the conversation.*[4]

[4] CAVEAT: communication over Slack is *not* end-to-end encrypted, so although no one else *in this course* (*e.g.*, the instructor, TAs) will be able to see your private communications, that does not mean your messages are *secure* (from *e.g.*, the NSA).

6 *Honor Code*

All work in this course *must be entirely written by yourself.* You are highly encouraged to work with your friends and classmates, but

simply copying someone else's solution is absolutely prohibited. The same applies to copying from any other source than your God-given intellect. The use of large language models (LLMs) like ChatGPT is *heavily* discouraged; prompting a large language model to provide a whole or partial solution to an assignment in this class will result, at a minimum, in immediate forfeiture of credit on that assignment.

	RESOURCES	COLLEAGUES	LLM / GPT	SOLUTIONS
CONSULT	ALLOWED	ALLOWED	DISCOURAGED	FORBIDDEN
COPY	CITE	FORBIDDEN	FORBIDDEN	FORBIDDEN

Tab. 3: *"As a member of the Notre Dame community, I acknowledge that it is my responsibility to learn and abide by principles of intellectual honesty and academic integrity, and therefore I will not participate in or tolerate academic dishonesty."*

7 Accommodations

Students with Disabilities

The policy and practice of the University of Notre Dame provides reasonable accommodations for students with properly documented disabilities. Students can contact SBAS[1] for a confidential discussion in the Sara Bea Center or by phone at (574) 631 - 7157.

Visit https://supportandcare.nd.edu/ for more information about disability accommodations.

[1] Sara Bea Accessibility Services

Mental Health

If you are having mental health issues that are interfering with your ability to function in this course, please reach out to the instructor or the UCC[2] so that we can help you. The UCC provides *cost-free* and *confidential* mental health services to help you manage personal challenges that may threaten your emotional or academic well-being.

For more information about the University Counseling Center, please visit https://ucc.nd.edu.

[2] University Counseling Center

Academic Support

You are encouraged to visit with your Department Director of Undergraduate Studies (DUS) or your academic advisor for personalized assistance. Located in 204 Cushing Hall, engineering advisors are available to support your academic and professional goals, to provide guidance for effective study habits, and to connect you to resources across campus. In addition, the Academically Collaborative Engineering Spaces (ACES) Program offers *study rooms* and *small group tutoring* services for select courses.

For more details, see your director of undergraduate studies or academic advisor.

8 Copyright Notice